Name:

at1113exam: Expand, factor, and solve quadratics (v218)

1. Expand the following expression into standard form.

$$(4x - 3)^2$$

2. Expand the following expression into standard form.

$$(9x - 7)(9x + 7)$$

3. Expand the following expression into standard form.

$$(4x - 7)(5x + 9)$$

4. Solve the equation.

$$(8x + 9)(5x - 4) \;=\; 0$$

5. Solve the equation with factoring by grouping.

$$20x^2 - 15x - 8x + 6 \;=\; 0$$

6. Factor the expression.

$$64x^2 - 9$$

7. Factor the expression.

$$x^2 + 3x - 28$$

8. Solve the equation.

$$6x^2 + 13x + 14 \;=\; 4x^2 + 2x + 5$$